

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A system for managing communications between one or more on-board modules associated with a first machine and connected to one or more on-board data links and one or more off-board systems connected to one or more off-board data links, the system comprising:

a first off-board system connected to a first off-board data link, wherein the off-board module is remotely located from the first machine; and

a gateway embedded in the first machine including:

a communication application that uses a translation table stored in the gateway for converting information from a first communication protocol format to a second communication protocol format, and

a firewall application that is configured to perform, when executed by a processor, a firewall process that controls access to proprietary information associated with the first machine, wherein the firewall process:

determines whether a message received from the first off-board system is authorized based on a profile associated with the first off-board system,

determines whether a message received from the first off-board module includes a parameter identifier corresponding to one of a number of parameter identifiers included in the translation table, the parameter identifiers specifying

operational parameters of the first machine,
and

denies access to the proprietary information based on
at least one of (i) a determination that the
parameter identifier in the data message does
not correspond to one of the number of
parameter identifiers in the translation table
and (ii) the profile associated with the off-board
system.

2. (Original) The system of claim 1, wherein the firewall process denies or grants
access to the proprietary information based on a profile associated with a user
operating the first off-board system.

3. (Original) The system of claim 1, wherein the profile is associated with a user
of the off-board system and defines a type of access to a selected portion of the
proprietary information.

4. (Original) The system of claim 1, wherein the proprietary information includes
a parameter identifier data value.

5. (Original) The system of claim 1, wherein the firewall process allows the first
off-board system to access the proprietary information when the parameter identifier in
the message matches at least one parameter identifier included in the translation table.

6. (Currently amended) The system of claim 5, wherein the gateway executes
the communication application to convert the request to a different communication
protocol format when the firewall process allows the off-board system to access the
proprietary information.

7. (Original) The system of claim 1, wherein the firewall process denies access to an on-board module based on parameter information included in a second message.

8. (Previously presented) The system of claim 1, wherein the first machine moves between, or within, an environment and the firewall application controls access to proprietary information located in a remote location based on the position of the first machine.

9. (Previously presented) The system of claim 8, wherein the gateway receives the message from a second gateway included in a second machine that has moved into communication range of the first machine.

10. (Original) The system of claim 1, wherein the firewall application performs a second firewall process that controls access to the proprietary information based on a timing profile associated with the type of request.

11. (Original) The system of claim 1, wherein the request is a batch request including multiple sub-requests associated with the proprietary information, and the firewall process denies access to a portion of the proprietary information based on a determination that parameter identifiers associated with a respective portion of the sub-requests do not match any of the parameter identifiers included in the translation table.

12. (Currently amended) A method for managing communications in an environment including a first machine having one or more on-board data links connected to one or more on-board modules and a gateway, and one or more off-board data links connected to one or more off-board systems and the gateway, the method performed by the gateway comprising:

receiving a request generated by a first off-board system and transmitted on a first off-board data link; and

invoking a firewall application that performs a firewall process including the steps of:

identifying a destination device associated with the request,
converting the request from a first communication protocol format to a second communication protocol format compatible with the destination device,
determining whether the request is authorized based on a profile associated with the first off-board system,
determining whether the request includes a parameter identifier that matches a parameter identifier included in a memory location maintained by the gateway, the parameter identifier specifying an operational parameter of the first machine, and
denying or granting access to proprietary information based on the two determining steps.

13. (Original) The method of claim 12, wherein the profile is associated with a user of the off-board system and defines a type of access to a selected portion of the proprietary information.

14. (Original) The method of claim 12, wherein the proprietary information includes a parameter identifier data value.

15. (Original) The method of claim 12, wherein the firewall process allows the first off-board system to access the proprietary information when the parameter identifier in the request matches at least one parameter identifier included in the memory location.

16. (Previously presented) The method of claim 12, wherein the gateway executes a communication application to convert the request to a different communication protocol format when the firewall process allows the off-board system to

access the proprietary information.

17. (Original) The method of claim 16, wherein the memory location is included in a translation table used by the communication application to convert parameter data values to different formats.

18. (Original) The method of claim 12, wherein the firewall process denies access to an on-board module based on parameter information included in a second request.

19. (Previously presented) The method of claim 16, wherein the first machine moves between, or within, an environment and the method further includes:
controlling access to proprietary information located in a remote location based
on the position of the first machine.

20. (Previously presented) The method of claim 19, wherein the gateway receives the request from a second gateway included in a second machine that has moved into communication range of the first machine.

21. (Original) The method of claim 12, wherein the method further includes:
controlling access to the proprietary information based on a timing profile
associated with the type of request.

22. (Original) The method of claim 12, wherein the request is a batch request including multiple sub-requests associated with the proprietary information, and the firewall process further includes:

denying access to a portion of the proprietary information based on a
determination that parameter identifiers associated with a respective
portion of the sub-requests do not match a parameter identifier included in
the memory location.

23. (Currently amended) A computer-readable medium including instruction for performing, when executed by a processor, a method for managing communications in an environment including a machine having one or more on-board data links connected to one or more on-board modules and a gateway, and one or more off-board data links connected to one or more off-board systems and the gateway, the method performed by the gateway comprising:

receiving a request generated by a first off-board system and transmitted on a first off-board data link; and

invoking a firewall application that performs a firewall process including the steps of:

identifying a destination device associated with the request,

converting the request from a first communication protocol format to a second communication protocol format compatible with the destination device,

determining whether the request is authorized based on a profile associated with the first off-board system,

determining whether the request includes a parameter identifier that matches a parameter identifier included in a memory location maintained by the gateway, the parameter identifier specifying an operational parameter of the machine, and

denying or granting access to proprietary information based on the two determining steps.